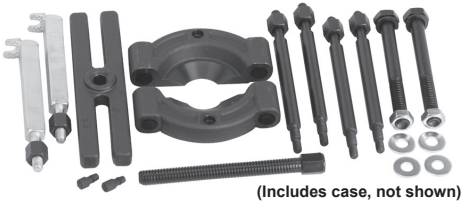
PITTSBURGH AUTOMOTIVE

14 PC. Gear Puller Set

Item 30305

INSTRUCTIONS & PRECAUTIONS



(Includes case, not shown)

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⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

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For technical questions or replacement parts, please call 1-800-444-3353.

Manual Revised 11c

Specifications

Gear Pulling Range	Pulls Gears 9/32 IN. to 3 IN.
Gear Puller Arms	Spread to 5-3/4 IN. Reach up to 4 IN.
Applications	Gear Pulling Bearing Pulling & Separating Timing Gear Pulling Steering Wheel Pulling Sprocket Pulling Pulley Pulling
Sprocket and Pulley Tapped Hole Capacity	5/16 IN. - 18 3/8 IN. - 16 3/8 IN. 24 8 x 1.25 mm
Construction	Center Bolt is hardened Steel

Important Safety Information

Precautions

1. Assemble and use only according to these instructions. Improper assembly and usage can create hazards.
2. Wear ANSI-approved safety goggles and heavy-duty work gloves during assembly and usage.
3. Keep area clean and well lit.
4. Keep children and other bystanders out of the area.
5. Do not use when tired or when under the influence of drugs or medication.
6. Use as intended only.
7. Inspect before every use; do not use if parts are loose or damaged.
8. Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

Operation Instructions

Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

Pulling Gears

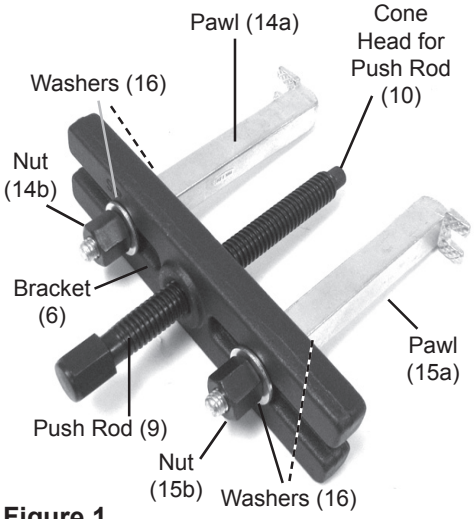


Figure 1

1. Thread the Push Rod (9) into the Bracket (6).
2. Place a Washer (16), a Nut (14b or 15b) and a Washer (16) onto the Pawls (14a & 15a). Slide each Pawl into a slot on the Bracket, as shown above, so one Washer is below the Bracket and the Nut and other Washer are above the Bracket.
3. Slide the Cone Head Insert (10) into the end of the Push Rod (9).
4. Slide the Pawls together until they fit snuggly against the gear to be pulled, then tighten the Nuts on both Pawls.
5. Screw the Push Rod (9) into the shaft at the center of the gear by turning the Head of the Push Rod with a wrench (not included). This will allow the gear to be pulled clear of its position.

Separating Ball Bearings

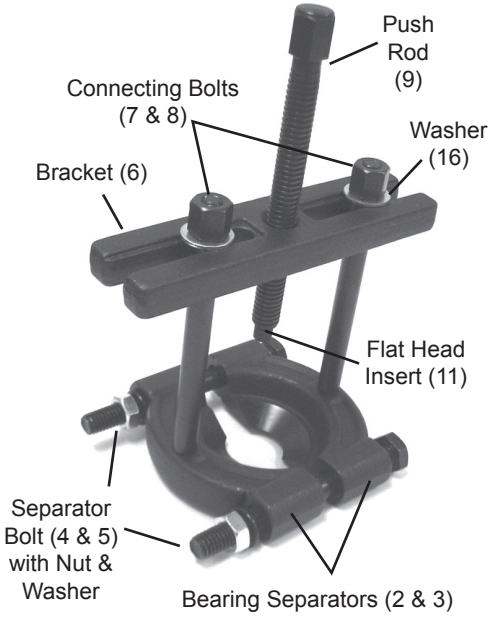

Push Rod (9)
Connecting Bolts (7 & 8)
Washer (16)
Bracket (6)
Flat Head Insert (11)
Separator Bolt (4 & 5) with Nut & Washer
Bearing Separators (2 & 3)

Figure 1

1. Thread the Push Rod (9) into the Bracket (6), then slide the Flat Head Insert (11) into the end of the Push Rod.
2. Lay the Bearing Separators (2 & 3) so they face each other, creating an open circle.
3. Remove the Nut and Washer from the Separator Bolts (4 & 5), then slide the Bolts through

the Bearing Separator holes and replace the Washers and Nuts. Note: Do not tighten Bolts.

4. Slide a Washer (16) onto the two Connecting Bolts (7 & 8) and then slide them into the slots on the Bracket, keeping the Washers above the Bracket. Thread the Bolt-ends into the holes on the top of the Bearing Separators.

Note: A light coat of oil on the shaft near the bearing gear and on the Push Rod (9) is recommended for difficult pulling jobs.

5. Position the Bearing Separators (2 & 3) around the base of the Bearing to be separated.
6. Tighten each nut evenly.
7. Using an adjustable wrench (sold separately), tighten the Push Rod (9) against the center shaft of the bearing to separate the bearings from one another.

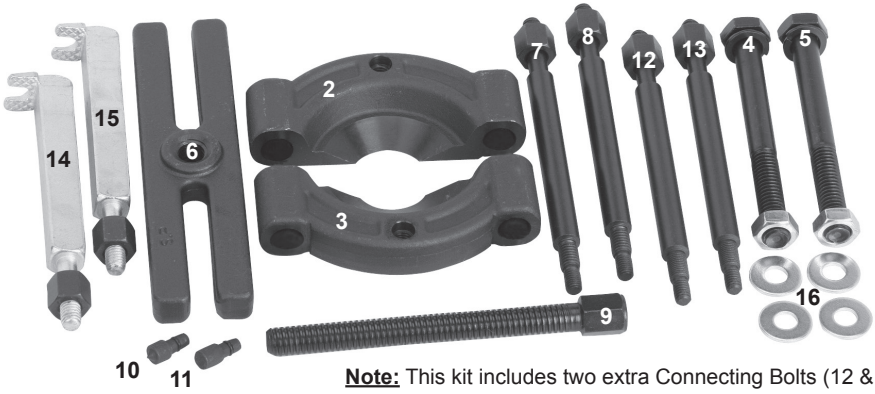
Maintenance

1. **Before each use,** inspect the general condition of the tool. Check for cracked or broken parts and any other condition that may affect its safe operation. If damaged, have corrected before further use.
2. **Do not use damaged equipment.**
3. Coat all parts with a light oil to prevent rust, then store them in the case, in a clean, dry location.

Parts List and Assembly Diagram

Part	Description	Qty
1	Case (not shown)	1
2	Bearing Separator - 3/8" x 16T	1
3	Bearing Separator - 3/8" x 16T	1
4	Bolt for Separator - 1/2" x 12T	1
5	Bolt for Separator - 1/2" x 12T	1
6	Bracket	1
7	Connecting Bolt - 3/8" x 16T, step down thread: M8 x 1.25	1
8	Connecting Bolt - 3/8" x 16T, step down thread: M8 x 1.25	1
9	Push Rod	1
10	Cone Head for Push Rod	1

Part	Description	Qty
11	Flat Head for Push Rod	1
12	Connecting Bolt - 3/8" x 24T, step down thread 5/16" x 18	1
13	Connecting Bolt - 3/8" x 24T, step down thread 5/16" x 18	1
14a	Pawl (3/8" x 16T)	1
14b	Nut	1
15a	Pawl (3/8" x 16T)	1
15b	Nut	1
16	Flat Washer	4
17	Lube Oil Bottle (not shown)	1



Note: This kit includes two extra Connecting Bolts (12 & 13) for use with other bearings or gears. These parts do not fit the Bearing Separators (2 & 3) in this Gear Pulling Set.

Record Serial Number Here:

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

PLEASE READ THE FOLLOWING CAREFULLY

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